

**Amendments to the Claims:**

Please amend claim 4 as indicated below.

Please cancel claims 1 and 5-20 without prejudice.

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-3 (Canceled)

Claim 4. (Currently Amended)      ~~The method as defined in Claim 1;~~ A method for setting the system parameters of a scanning microscope comprising the steps of:

Controlling an acquisition of an image of a specimen with a control computer;

Inputting at least one image quality feature after an image of the specimen is acquired, the at least one image quality feature including at least one of a noise of detected image data, a signal-to-noise ratio of the detected image data, a bleaching behavior of a fluorescent marking of a specimen, a detection speed of an image data set to be detected, a contrast, and a resolution;

Converting the at least one image quality feature into at least one system parameter of the scanning microscope by the control computer, the at least one system parameter including at least one of a power level of a light source, a wavelength of the light source, a scanning speed of a scanning unit, a diameter of a confocal detection pinhole, an amplifier characteristic of a confocal detector, and a number of individual images to be detected for averaging of an image;  
and

Setting the at least one system parameter;

wherein an image quality expected to be achievable, for the at least one inputted image quality feature, is calculated in the next acquired image and outputted to the user; and

wherein an inputted image quality feature, upon conversion into system parameters of the scanning microscope, influences or modifies several system parameters of the scanning microscope.

Claims 5-20. (Canceled)